

August 1, 2014

**MEMORANDUM**

**TO:** Zachariah E. Beasley, P.S., M.S. - Tippecanoe County Surveyor

**FROM:** David W. Eichelberger, P.E. - CBBEL, Indianapolis  
Stephen D. Benagh, CFM, CISEC - CBBEL, Indianapolis

**PROJECT:** **GE Aviation – Mass Earthwork and Grading  
CBBEL Project No. 02-038 (MY)**

**DEVELOPER/OWNER:** **Brasfield & Gorrie/GE Aviation**

**LOCATION:** **40° 21' 25" Latitude  
-86° 49' 27" Longitude**

**RECOMMENDATION:** **Conditional Approval**

GE Aviation is proposing to develop approximately 45 acres of an overall 100 acre site for a new factory located west of the intersection of U.S. 52 and County Road 450 East in Wea Township. The current site is in agricultural use. This submittal is for the mass earthwork and grading of approximately 45 acres of the overall 100 acre site. Current drainage is to the south to the J.N. Kirkpatrick Regulated Drain. This submittal does not include the construction of the factory, parking and drives around the factory. This project will encompass mass earthwork and grading of the building pads, one wet detention basin, one dry detention basin and the related swales and connection pipes to convey runoff to the detention basins and to the J.N. Kirkpatrick Regulated Drain. Utility infrastructure will be installed and extended to the site during the mass earthwork. The project also includes construction of a future access drive to the west and connection to David Howarth Drive. The applicant will continue to develop construction documents for the final site plan and provide these documents in a future submittal.

The project is within the City of Lafayette and will outlet to the Tippecanoe County J.N. Kirkpatrick Regulated Drain. The project site is located within the Tippecanoe County Elliott Ditch 305(b) Priority Watershed.

After a review of the submitted material, CBBEL offers the following comments regarding the project's compliance with the Tippecanoe County Stormwater Management Ordinance (Ordinance) and the Tippecanoe County Stormwater Technical Standards Manual (Standards):

**The following project is recommended for Conditional Approval. The applicant should present the project at the August 6, 2014 Tippecanoe County Drainage Board Meeting and complete all conditions, prior to receiving Final Construction approval.**

**1.0 Variances/Encroachments**

1. The applicant has prepared a petition to encroach within the J.N. Kirkpatrick Regulated Drain easement with a portion of a pond embankment, proposed final outlet pipe, 10' walking trail and underground utility conduits. The petition and Exhibit "A" should be revised to include the emergency spillway grading and the proposed landscape berm which will extend into the regulated drain easement. A larger exhibit that clarifies the encroachment dimensions should be provided. The applicant must coordinate the encroachment of the J.N. Kirkpatrick Regulated Drain with the Tippecanoe County Surveyor's Office. This encroachment will also require final approval from the Tippecanoe County Drainage Board.

## **2.0 Stormwater Quantity Conditions**

1. A completed permit application should be submitted.
2. Since the project site is located within the city of Lafayette, CBBEL conducted a review only of the stormwater quantity impacts on Tippecanoe County regulated drains. The applicant must obtain approval from the city of Lafayette Engineer's Office for the proposed stormwater management plan.
3. The cover sheet of the project plans should note the acreage of the site that discharges to the J.N. Kirkpatrick Regulated Drain in the existing condition and the acreage and amount of road right-of-way that will discharge to the J.N. Kirkpatrick Regulated Drain in the developed condition.
4. The top of bank and statutory regulated drain easement of 75' from top of bank of the J.N. Kirkpatrick Regulated Drain should be labeled and dimensioned on the plans.
5. The 100-year Base Flood Elevation associated with the J.N. Kirkpatrick Regulated Drain along the project site should be provided on the plans.
6. The proposed plans do not appear to account for the future road extension to the west and all of the proposed C.I.C Building into the proposed storm detention modeling. The applicant should be aware that the future road and all development will be required to meet the general release rate requirements for the J.N. Kirkpatrick Regulated Drain when developed. Current plans show this area as direct runoff during the interim period of mass earthwork.
7. The final plans and drainage report are to be certified.

## **3.0 Stormwater Quality Conditions**

1. Since the project site is located within the city of Lafayette, CBBEL did not conduct a review of the Stormwater Pollution Prevention Plan (SWPPP). The applicant must obtain approval from the city of Lafayette Engineer's Office for the proposed SWPPP.

## **4.0 General Conditions**

1. The applicant must present the project at the Tippecanoe County Drainage Board meeting for the project to be considered for approval.
2. The applicant must pay any final drainage review fees per Ordinance 2011-27-CM and pay the Phase II stormwater program fees.
3. The applicant should submit certified copies of the final construction plans and drainage report when approval from the city of Lafayette is received.
4. The applicant must submit digital copies of both the Final Construction Plans and Final As-Built Plans.

No error or omission in the plans, calculations or applications (whether said plans, calculations or applications have been reviewed by the review engineer or not) shall permit or release the applicant and designer from constructing this work in any other manner than that provided for in the County Ordinance.

pc: The Schneider Corporation

DWE/sb  
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